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## AlphaStar CONC

### PRODUCT # 208

(For Consideration in Food, Brewing and Animal Feed Applications)

#### I. DESCRIPTION

**AlphaStar CONC** is an alpha amylase enzyme produced by the controlled fermentation of *Bacillus subtilis var.* The enzyme is capable of hydrolyzing a-D-(1,4) glucosidic linkages of starch. **AlphaStar CONC** converts amylose and amylopectin to soluble dextrans and small quantities of glucose and maltose.

#### II. PROPERTIES

Appearance: Tan to dark brown powder (Color does not affect or reflect activity)  
Odor: Characteristic odor  
pH (1% soln): 7.0 – 10.0  
Guaranteed Activity: Alpha Amylase >7,000 KMWU/g

#### III. EFFECT OF pH

Optimum pH range 6.0 – 7.0  
Effective pH range 5.0 – 7.5  
pH Stability 5.0 – 10.0

#### IV. EFFECT OF TEMPERATURE

Optimum Temperature 70°C  
Effective Temperature Range 65 - 75°C  
Temperature Stability Up to 90°C

#### V. APPLICATIONS

##### FOOD INDUSTRY

Baking Anti-staling agent  
Brewing Liquefaction of adjuncts and removal of starch haze  
Candy Scrap candy recovery  
Cereal Production of pre-cooked cereals. Reduces the viscosity of the cereal prior to roll drying.  
Cocoa Reduce the viscosity of chocolate syrups  
Distilling Mash liquefaction

Fermentation	Liquefaction of starch fermentation media
Starch	Reduction of high viscosity starch slurries, Production of substrates for dextrose production, Production of substrates for further enzyme conversion, Removal of starch hazes from syrups.

#### **OTHER INDUSTRIES**

Paper	Preparation of size and coatings
Textile	Desizing
Starch	Preparation of starch adhesives
Other	Cleaning starch processing equipment, i.e. extruders, etc.

#### **VI. STORAGE STABILITY**

In sealed containers, under cool dry conditions, the loss of activity is normally less than 10% over six months. Storage life can be extended by storing under refrigeration at 5°C.

#### **VII. TECHNICAL SERVICE:**

Information covering specific applications for this product is available from your Dyadic International sales/technical representative. We will work with your technical personnel to resolve problems and optimize your process.

#### **VIII. SAFETY AND HANDLING:**

For detailed information please refer to the **AlphaStar CONC** MSDS available upon request.

*Nothing disclosed is to be construed as a recommendation to use our products in violation of any patents. The information presented is believed to be accurate. However, said information and products are offered without warranty or guarantee, except as to the composition and purity stated herein since the ultimate conditions of use and variability of the materials treated is beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale. The goods described herein are sold "as is" and "with all faults". The seller specifically disclaims all warranties in connection with the sale of the goods, both express and implied, including, without limitation, the warranties of merchantability and fitness for any particular purpose, as those terms are defined in the uniform commercial code of Florida. The seller shall not be liable for any incidental or consequential damages whatsoever.*